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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/523,972 | 02/08/2005 | Eiji Kadouchi | 43890-715 | 1562 |
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| MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096 | | | EXAMINER BERHANU, SAMUEL | |
| | | | ART UNIT 2838 | PAPER NUMBER |

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/523,972

Applicant(s)

KADOUCHI ET AL.

Examiner

Samuel Berhanu

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2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 is/are rejected.
7) ☒ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 08 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashiguchi et. al. (JP Publication number: 62-234878).

Regarding Claim 1, Hashiguchi et. al. disclose in Figures 1-2, a battery storing device comprising: a battery (8) storing section (1) that can store a battery inside and has a heat retaining function of retaining heat of the battery that is stored inside using heat insulating material (the box is a hermetically-sealed heat-insulated box, see abstract and Claim 1) ; and a heat retention releasing mechanism (an air flowing door 3) for releasing the heat retaining function, wherein the heat retention releasing mechanism (3) opens and closes an opening for making air flow between the inside and outside of the battery storing section (1) (noted that element 2 and 3 is used as a means of air flowing in and out from the box 1, see Abstract)

Regarding Claim 8, Hashiguchi et. al. disclose in Figures 1-2, a heat conductor forming a heat conduction route for conducting heat between the inside and outside of the battery storing section; and a mechanism for opening and closing the heat conduction route (noted that when the door is opened/closed heat is exchanged between the inside and the outside environment)

Regarding Claim 9, Hashiguchi et. al. disclose in Figures 1-2, a temperature detector (10) for detecting temperature inside the battery storing section ; and heat-retention release control section for controlling the heat retention releasing mechanism based on the temperature detected by the temperature detector (Noted that the door is opened and closed as the temperature inside heat-insulated box deviates)

Regarding Claim 11, Hashiguchi et. al. disclose a battery storing device (1); and a battery stored in the battery storing device.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashiguchi et. al. (JP Publication number: 62-234878) in view of Calsonic Corp. (Jp 08-022845) .

Regarding Claim 2, Hashiguchi et. al. do not disclose explicitly, wherein the heat insulating material (78) is vacuum heat insulating material. However, Calsonic discloses in Figures 1-3, wherein the heat insulating material (78) is vacuum heat insulating material. It would have been obvious at the time of the invention to a person ordinary skill in the art to use vacuum as a heat insulating means as taught by Calsonic in order

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to eliminate heat loss from the absorbing membrane through gas convection and conduction.

Regarding Claim 3, Calsonic discloses in Figures 1 –13, an independent discharge circuit that is directly coupled to the battery (noted that the heater discharges the heat of the battery independently from the main charging and discharging circuit of the battery) can operate discharge (heat discharge) independently from the charge/discharge operation of a main circuit.

Regarding Claim 4, Calsonic discloses in Figures 1 –13, wherein the independent discharge circuit has a heating resistor (44) (the PTC device is used a heating mechanism and has resistance variation).

Regarding Claim 5, Calsonic discloses in Figures 1 –13 discloses, wherein the independent discharge circuit has at least a PTC device (44).

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashiguchi et. al. (JP Publication number: 62-234878) in view of Calsonic Corp. (Jp 08-022845) as applied to claim 3 above, and further in view of Toya (US 6,304,061).

Regarding Claim 6, Hashiguchi et. al. disclose in Figures 1-2, a temperature detector (10) for detecting temperature inside the battery storing section. Neither Hashigluchi et. al. nor Calsonic discloses explicitly, a circuit control section for controlling the independent discharge circuit based on the temperature detected by the temperature detector. Toya discloses in Figures 1 and 2, a circuit control section (17) for controlling the independent discharge circuit based on the temperature detected by the temperature detector (16). It would have been obvious at the time of the invention to

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a person having ordinary skill in the art to deploy a circuit that control a discharge of a battery based on its temperature in Hashiguchi et. al. storage battery holding device as taught by Toya in order to avoid over storage battery over heating.

6. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashiguchi et. al. (JP Publication number: 62-234878) in view of the Admitted Prior Art (APA).

Regarding Claim 10, Hashiguchi et.al. do not disclose explicitly, the battery is a lithium secondary battery. However, in applicant's disclosure page 1, line 27, a lithium secondary battery is disclosed. It would have been obvious at the time of the invention to a person ordinary skill in the art at the time of the invention to substitute Hashiguchi et. al. battery with a lithium secondary battery as taught by APA in order to have a high density and a low self-discharge battery with a light weight.

Regarding Claim 12, Hashiguchi et. al. do not disclose explicitly, an electrically driven mechanism for being driven by power supply from the power supply device. However, Applicant's disclosure in page 1, line 16 and page 3, lines 6-9, electrically driven mechanism (automobile) driven by power supply (battery) from the power supply device. It would have been obvious at the time of the invention to a person having ordinary skill in the art to use Hashiguchi ei. al. battery in the automobile as taught by APA in order to provide a backup power supply when main energy supply fails to provide power to the engine.

Response to Arguments

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

SB

KARL EASTHOM
SUPERVISORY PATENT EXAMINER



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